JOSEPH P. TEASDALE GOVERNOR



CAROLYN ASHFORD DIRECTOR

missouri department of natural resources

2010 Missouri Blvd

P.O. Box 1368

Jefferson City, Missouri 65101

314-751-3241

MEMORANDUM

DATE:

May 26, 1978

TO:

Chuck Kroeger, Environmental Specialist II, Springfield Regional Office and

FROM:

SUBJECT: Algae Sample from Spring River near Verona, Missouri

Last February you sent me a sample of algae you had collected February 8, 1978, which you wanted identified. You indicated the sample was taken below Syntex Company, a fertilizer and organic chemical manufacturing plant on the Spring River. I did not have the capability to identify the algae at that time, so I sent it to a biologist with the EPA for identification. I later talked with you over the telephone and indicated what the partial analysis showed. I was in Kansas City this week taking a "crash course" on algae identification and talked with the biologist about your sample. He said he made additional identifications, however, there were no "earth shattering findings".

The most abundant organisms were periphytic diatoms: Gomphonema olivaceum, Synedra ulna, Nitzschia spp., Navicula spp. and Cymbella sp. All of these organisms can be found in eutrophic waters somewhat high in nutrients and in zones where oxidation of organics is proceeding. The farmer who complained that his cattle would not drink the water should be more concerned with what is causing the growths of algae, i.e., what chemicals in the water are promoting the growth of the algae. The algae alone would probably have no effect on the cattle.

Chuck, I'm sorry this has taken so long to get to you. Hopefully, I can get future analyses to you much more quickly since I'm learning to identify them. So, if you have more algae samples in the future, let me know.

Dr/ms



7 51010

SUPERFUND RECORDS